

Alcimedea

Although there are many roadside testing devices available for the screening of abused drugs, none of them can be used for the detection of ketamine, a popular abused drug in Hong Kong. In a study to develop a protocol for effective roadside detection of drug-impaired drivers (*For Sci Int* 2007;170:51–8), 62 volunteers exiting from clubs in Hong Kong were assessed using field impairment tests (FIT) that included measurements of three vital signs (body temperature, pulse rate and blood pressure), three eye examinations (pupil size, lack of convergence [LOC] and horizontal gaze nystagmus [HGN]) and four divided attention tests (Romberg, one-leg stand, finger-to-nose and walk-and-turn tests). The study demonstrated the obvious popularity of ketamine as a recreational drug in Hong Kong, as 39 of the 62 volunteers were found to have the drug in their oral fluid. Of these ketamine users, 21 had only ketamine in their oral fluid samples while the rest (18 subjects) had other drugs in addition to ketamine. The researchers found that FIT successfully identified 15 (71%) of the 21 ketamine-only users. By comparing the FIT observations on the 21 ketamine-only users with drug-free subjects, the typical signs and symptoms observable for subjects under the influence of ketamine included LOC, HGN, elevated pulse rate and failing the divided attention tests, especially the walk-and-turn and one-leg stand.

The results from the first year of a random drug-testing program conducted in the state of Victoria, Australia, suggest that driving under the influence of methamphetamine is a bigger problem in the state than driving under the influence of cannabis (*For Sci Int* 2007;170:105–10). Of the 13,176 roadside drug tests performed, there were 313 cases that were subsequently confirmed to have methamphetamine (MA), methylenedioxymethamphetamine (MDMA) or Δ^9 -tetrahydrocannabinol (THC) in their oral fluid. These comprised 269, 118, and 87 cases positive to MA, MDMA, and THC, respectively. The overall drug positive rate was 2.4% of the screened population.

Drug testing is becoming increasingly common, not only in the criminal justice system but also in the workplace and in schools. Given the potential severity of the consequences of a positive test it is not surprising that many people who use drugs try to evade detection. There are many different methods employed to defeat urine drug tests, some of

which are not without their risks. Niacin is available by prescription and as an over-the-counter food supplement. When used pharmacologically, niacin has been associated with multiple adverse effects, most typically skin flushing and itching, as well as hepatotoxicity. Because niacin promotes metabolism and is associated with flushing, some individuals believe that taking large doses will produce a urine drug test negative for various drugs of abuse, including cannabis and cocaine. A recent case report presents four cases where this novel use of niacin was associated with significant adverse effects (*Ann Emerg Med* 2007;50:587–90). Two cases had isolated skin manifestations, whereas the other two presented with life-threatening complications, including hepatotoxicity, metabolic acidosis and disturbed glucose metabolism. One of these cases involved a 14-year-old cannabis user who took eleven 500-mg tablets of niacin in the 36-h before he was due to meet his parole officer. The other was a 17-year-old female user of cannabis and ecstasy who became ill after taking five 500 mg tablets of niacin. Both patients improved after stopping niacin use and following supportive treatment.

The case report of a 4-year-old girl who was admitted to hospital with pain and swelling in the vulvar region reminds us of the importance of considering alternative diagnoses to sexual abuse when faced with abnormal genital signs (*J Emerg Med* 2007;33:283–4). Physical examination revealed an enlarged, oedematous, erythematous and painful clitoris. The mother denied a similar episode in the past, and there was no history of trauma, urinary tract infection, and vaginal discharge. A diagnosis of hair tourniquet syndrome was made when a long black hair was noted to be encircling the clitoris. The diagnosis and treatment in this case was easy, but if medical assistance is delayed the associated soft tissue swelling can hide the constricting hair. Few cases of clitoral tourniquet syndrome have been reported. Although in many cases the condition develops accidentally, there have been reports of intentional wrapping of hair around the clitoris (and around the penis in boys) – thus, child abuse should always be considered and excluded.

A recent edition of *Child Abuse and Neglect* (2007;31:1019–114) was devoted to the results of three research articles evaluating the efficacy of Children's Advocacy Centres.

The concept of a Children's Advocacy Centre (CAC) was first announced in the USA in 1984. The primary aim of CACs was to increase the conviction rate for child sexual abuse, but it also had the far more humane goal of introducing more child-friendly criminal investigations by ensuring that the child would only be interviewed once in a child-friendly environment rather than being subjected to multiple intrusive interviews and inquiries in frightening police stations, daunting medical settings, and bureaucratic social services offices. Although there had been a widespread assumption that CACs were the best way to assess

children when sexual abuse is suspected, there had hitherto been scant research on the effectiveness of these centres. The research published in this special edition of the journal showed that CACs improved access to forensic medical examinations for child sexual abuse victims, such examinations being twice as likely if a child presented to a CAC as opposed to non-CAC comparison facilities. However, the jury is still out on the two outcomes that spawned the CAC movement; successful criminal prosecution of sexual abuse offenders and more child-sensitive investigations of sexual abuse allegations.